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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,192	02/07/2001	David Charles Adams	ADN2653P1US	9033

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EXAMINER

LEUNG, JENNIFER A

ART UNIT PAPER NUMBER

1764

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/778,192

Applicant(s)

ADAMS ET AL.

Examiner

Jennifer A. Leung

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 08 November 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: ____.

Claim(s) objected to: ____.

Claim(s) rejected: 1-9.Claim(s) withdrawn from consideration: 10-12.

8. ☒ The drawing correction filed on 19 May 2004 is a) ☒ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

Hien Tran
HIEU TRAN
PRIMARY EXAMINER

Continuation of Item 5.

The request for reconsideration has been considered but it does NOT place the application in condition for allowance, for the same reasons set forth in the final Office Action.

Beginning on page 4, fourth paragraph, applicants argue,

“Although the reactor described in Spott is a loop, it is clearly not a “loop reactor” which recycles the reactor charge while fresh raw materials are added and overflowing product is collected. Instead, the reactor charge in Spott is discharged by gravity through tube 65 from vessel 59 while the pigs are separated from the reactor charge being discharged by the slanted mesh grid 60 and tube 62 is just a pig return line which does not contain any reaction charge. Thus, the reactor charge in Spott does not loop around as it would in a true loop reactor.”

The examiner respectfully disagrees and maintains that the reactor of Spott structurally meets the claim to “a reactor tube which connects the outlet of the circulation pump to an inlet of the circulation pump.” (claim 1, lines 2-3). This is clearly shown in FIG. 3 of Spott (i.e., pump 52, with tube 56/57/58/62/63/64 which connects to both the discharge and inlet sides of the pump, thereby defining a loop). It is noted that the features upon which applicant relies (i.e., means for enabling the reactor charge to “loop around as it would in a true loop reactor”, or structure to enable a specific flow path of reactor charge) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Additionally, applicants argue,

“In fact, the reaction product is not and cannot be recirculated, making the reactor of Spott unsuitable for the continuous polymerization disclosed in the present application.”

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In response to applicant's argument that the apparatus of Spott is unsuitable for conducting a continuous polymerization reaction, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, Spott discloses on page 3 (lines 1-5) that the invention is particularly directed toward a device for the continuous or sequential execution of reactions in the liquid phase, and on page 3 (lines 7-19), Spott specifically suggests using such device as a reactor for the execution of *continuous chemical reactions*, e.g., photo-initiated *emulsion polymerization* of water soluble monomer (see page 11, line 13, to page 13, line 12, for a more detailed description of the polymerization reaction).

Beginning on page 5, second paragraph, applicants argue,

“One skilled in the art would not be motivated to take the non-loop emulsion polymerization reactor taught by Spott and combine it with the teachings of Howe, relating to long distance transport lines, especially when trying to employ a pig to clean a continuous loop reactor that requires a way for the pig to be removed, replaced or halted without shutting down the polymerization process or disturbing the flow of the reaction medium.”

In response to applicant's argument that the apparatus of Howe (which relates to cleaning internal walls of pipelines) is nonanalogous art to the apparatus of Spott (which relates to cleaning internal walls of a tubular polymerization reactor), it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis

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for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). Although the two apparatuses differ in their intended use, both Spott and Howe are concerned with the particular problem of maintaining the internal walls of a tube clean and free of debris, by the use of scrapers or pigs, without causing undue flow interruption during the cleaning process. Accordingly, one of ordinary skill in the art would have considered the apparatuses of Spott and Howe to comprise analogous art.

Beginning on page 5, third paragraph, applicants argue,

“As can be clearly understood from Howe, the pigs are not stationed in the by-pass interchange 9, but merely pass through it without stopping. The pigs are not and cannot be taken out from the by-pass interchange 9. In fact, one of the advantages asserted by Howe is that the pigs (displacers) are maintained in their same position with respect to the flowing stream of liquids or gasses. This would necessarily mean that the pigs or displacers are not stationed in or removed from the by-pass interchange 9.”

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., means for enabling the pigs to be taken out of or removed from the by-pass tube) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Additionally, the examiner contends that the apparatus of Howe indeed comprises means for enabling the pigs to be stationed or stopped in the by-pass interchange 9, wherein said means comprises a controller 60 which operates a plurality of valves 1, 2, 3, 4, 12, 13 to control the sequence of receiving or launching of pigs/spheres 14. See column 5 (lines 11-37) and column 6 (lines 9-32). For instance,

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"The control sequence may be timed so that the trailing end of the leading product batch will have time to move through the pump and back into the interchange before the sphere is launched downstream." (specifically, column 5, lines 25-28).

"If the spheres were too close together to allow time to complete the sequence, the controller would hold the system in the receive status until both sphere had entered the interchange. Then it would initiate the sequence to by-pass both spheres together." (specifically, column 6, lines 20-26).

Continuation of Item 7.

Upon appeal and entry of the amendment (which corrects for antecedent basis), claim 2 would be rejected for the same reasons set forth in the final Office Action, dated August 6, 2004.

Hien Tran

**HIEN TRAN
PRIMARY EXAMINER**

Jennifer A. Leung
November 29, 2004 *JAL*